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(71) Applicant (for all designated States except US): RAFAEL  
- ARMAMENT DEVELOPMENT AUTHORITY LTD.  
[IL/IL]; P.O.Box 2250, 31021 Haifa (IL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SHAPIRA, Ruth  
[IL/IL]; Sweden 23, 34980 Haifa (IL).

(74) Agent: FRIEDMAN, Mark; 7 Jabolinsky St., 52520 Ramat Gan (IL).

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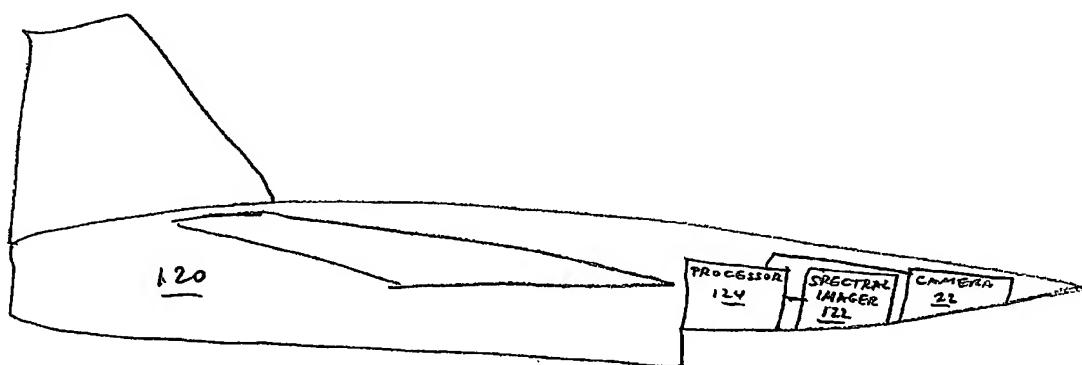
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(54) Title: SPECTRAL TRACKING



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(57) Abstract: A method of tracking a target. The method includes the steps of acquiring a first spectral image of a scene that includes the target, designating a spectral reference window, in the first spectral image, that includes a respective plurality of pixel vectors, acquiring a second spectral image, of the scene, that includes a respective plurality of pixel vectors, and hypercorrelating the spectral reference window with the second spectral image, thereby obtaining a hypercorrelation function, a maximum of the hypercorrelation function then corresponding to a location of the target in the scene.

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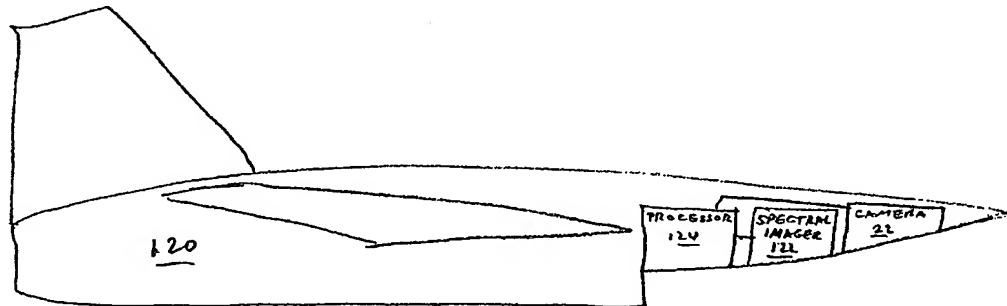
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(54) Title: SPECTRAL TRACKING



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(57) Abstract: An aircraft (120) has a spectral imager (122) along with a panchromatic imaging mechanism (22) in order to image the scene. A processor (124) implements the algorithms for spectral image processing in which a first spectral image and a second spectral image are processed and in which a spectral reference window is hypercorrelated with the second spectral image.